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(51) INT CL<sup>6</sup>

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(56) Documents Cited

GB 2298539 A GB 2287535 A GB 2278197 A

EP 0636863 A1 WO 94/07225 A1

WPI Accession No. 94-058363/08 & DE 4243511 A1  
(GERDES et al) 17.02.94 (see abstract) WPI Accession  
No. 86-339701/52 & DE 35212220 A (SIEGERT)  
18.12.86 (see abstract)

(58) Field of Search

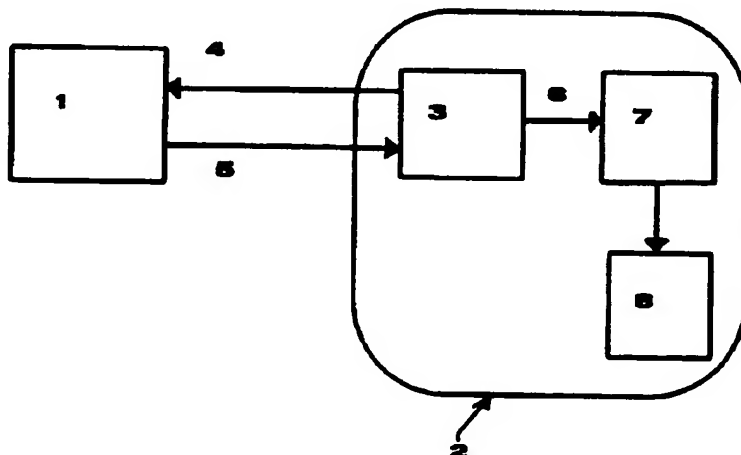
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On-line : WPI

(54) A location-dependent message system

(57) A system comprising a device 2 which can be carried by a user and a transponder 1 which can be mounted at a specific location; the device having means 3 to communicate with the transponder when the user is within a predetermined distance from the transponder to cause the transponder to transmit a code 5 specific to the location; the means 3 receiving the location-specific code and employing the code to retrieve a message providing location specific information, eg a spoken message, to the user from a random access store 7 for playback (at 8). A number of transponders can be provided at respective different locations each with it's own code to trigger a different message.



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**A location-dependent message system**

The present invention relates to a message delivery system which is automatically actuated when a user approaches a particular location to provide a message for the user associated with that location.

The particular intended use is be a means of providing location-specific voice information for the blind, but the system could be used wherever an automatic location-dependent message was required - e.g. to provide information to users of museums and art galleries or for tourist information.

In the preferred form infra-red transponders are mounted at the locations required and are interrogated by an infra-red signal from a device carried by the user to cause the transponder to transmit a code designating the location. Each transponder can be set to transmit a unique code. The location code is used by the device to retrieve the relevant message from a random access store and play the message to the user. The preferred storage device for the messages is a recordable mini-compact disc system; a large number of messages can be easily recorded and a simple track number code can be used for retrieval.

The transponder system need not use infra-red - any suitable remote transmission/reception system can be employed. Any form of message storage system which allows the random access of a particular message associated with the received location code is possible - solid state memory storage, for example.

The accompanying drawing shows an example of the basic arrangement. Reference 1 designates one of a number of transponders mounted at particular locations and reference 2 is a unit carried by the user. A signal transmitter/receiver 3, transmits, either continuously or periodically, a signal 4 which is received by a transponder 1 when the user approaches a location. The transponder 1 responds by transmitting a signal 5 which carries a code representative of the location and this is received by the unit 2.

The location code signal 6 is passed to a random access message store 7 and is used to retrieve a message particular to the location which is played via output device 8 e.g. a loudspeaker, earpiece, or headphones.

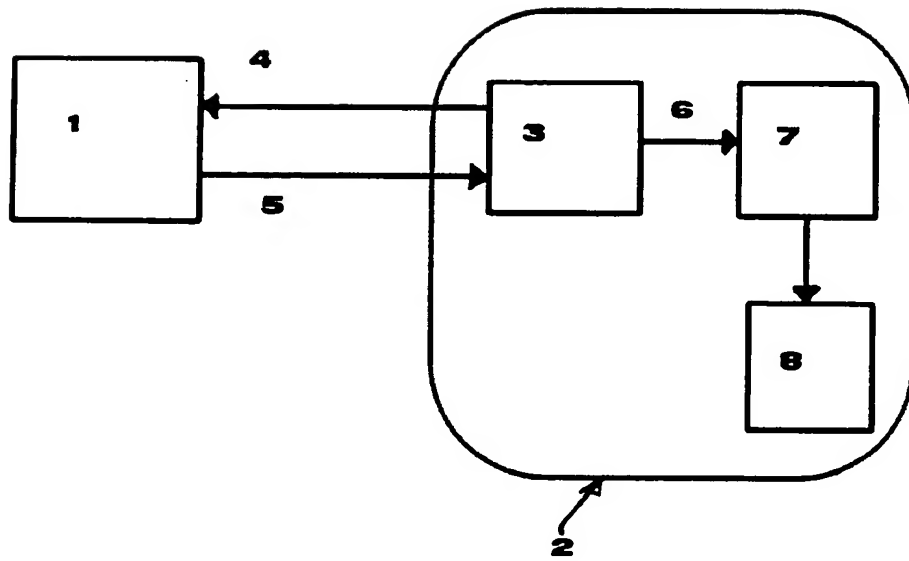
The transponder 1 and unit 2 preferably communicate using coded infra-red transmissions, but radio frequency, laser or any suitable means could be used. The message store 7 is preferably a mini-CD (recordable compact disc) player, and the location code input 6 can be a track number for the disc; but any medium capable of storing information for random access in response to a specific input signal could be employed.

While audible, particularly spoken word, messages are particularly intended, it will be appreciated that any randomly accessed stored signal which might be appropriate for retrieval and use at a specific location could be employed to produce, for example, non-verbal sounds, pictures or displayed text.

## **CLAIM**

A system comprising a device which can be carried by a user and a transponder which can be mounted at a specific location; the device having means to communicate with the transponder when the user is within a predetermined distance from the transponder to cause the transponder to transmit a code specific to the location; the device having means to receive the location-specific code and employ the code to retrieve a message from a random access store which provides location specific information to the user.

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# The Patent Office

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Claims searched: 1

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## Patents Act 1977 Search Report under Section 17

### Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.O): G1F

Int CI (Ed.6): G01C 21/04; G01S 1/04, 1/06

Other: On-line : WPI

### Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X,E	GB 2298539 A (DEEHAN) whole document	the claim
X	GB 2287535 A (UNIVERSITY OF SURREY) whole document	the claim
X	GB 2278197 A (WILLIAM) p.3,1.14 to p.4,1.12	the claim
X	EP 0636863 A1 (AISIN) col.5,11.23-42; col.6,1.16 to col.7,1.8	the claim
X	WO 94/07225 A1 (AT COMM. INC) see abstract, at least	the claim
X	WPI Accession No. 94-058363/08 & DE 4243511 A1 (GERDES et al.) 17.02.94 (see abstract)	the claim
X	WPI Accession No.86-339701/52 & DE 35212220 A (SIEGERT) 18.12.86 (see abstract)	the claim

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.